GENERAL VIEW

OF THE

AGRICULTURE

OF

DENBIGHSHIRE.

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GENERAL VIEW

OF THE

AGRICULTURE

AND

RURAL ECONOMY

OF

DENBIGHSHIRE.

WITH

OBSERVATIONS ON THE MEANS OF IMPROVING IT,

By GEORGE KAY.

DRAWN UP

FOR THE CONSIDERATION OF THE BOARD OF AGRICULTURE
AND INTERNAL IMPROVEMENT.

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GR III
BRITISH MUSEUM

TO THE READER.

IT is requeſted that this paper may be returned to the Board of Agriculture, at its office in London, with any additional remarks and obſervations which may occur on the peruſal, *written on the margin*, as ſoon as may be convenient.

IT is hardly neceſſary to add, that this report is, at preſent, printed and circulated for the purpoſe merely of procuring farther information reſpecting the Huſbandry of this diſtrict, and to enable every one to contribute his mite to the improvement of the country.

THE Board has adopted the ſame plan, in regard to all the other Counties in the United Kindom; and will be happy to give every aſſiſtance in it's power, to any perſon who may be deſirous of improving his breed of cattle, ſheep, &c. or of trying any uſeful experiment in Huſbandry.

LONDON,
June 1794.

GENERAL DESCRIPTION.

THIS county, on the weſt, is ſeparated from Caernarvonſhire by the river Conway, except Creyddyn hundred, which belongs to that county, although on the eaſt ſide of the river. On the north, for a ſhort ſpace, it touches upon the Iriſh ſea, and afterwards runs parallel to the ſmall county of Flint, in a ſouth-eaſtern direction as far as the river Dee, where it is bounded by Cheſhire and Shropſhire; and on the ſouth, by the counties of Montgomery and Merioneth. Its extreme length is 48 miles, its greateſt breadth about 18, and near the middle it contracts to one half. It contains about 410,000 acres, divided into 9 hundreds, and 57 pariſhes. Although a great part of Denbigſhire is rugged and mountainous, yet the lower grounds being encloſed, and in general well wooded, with a great variety of very rich valleys interſperſed, conſiderably ſoften its appearance. All the country about Wrexham, (the moſt populous, and largeſt town in North Wales, lying on the eaſtern parts of this county) are beautifully variegated. Chirk caſtle, the ſeat of Mr Middleton, within 12 miles of Wrexham, is pleaſantly ſituated on a riſing ground, commanding a moſt extenſive view, although ſurrounded with large and very valuable plantations. Wynnſtay, the ſeat of Sir Watkins Williams Wynne, which lies half way between Chirk and Wrexham, is alſo a moſt delightful ſituation, with extenſive old plantations; beſides a number of other gentlemen's ſeats, all of which are encompaſſed with fine woods. The banks of the Dee, ſome parts of which are watered, afford excellent paſture and hay. The moſt extenſive of the valleys is the celebrated vale of Clwyd, in which are a number of towns, villages and gentle-

mens ſeats. It is above twenty miles in length, and from three to eight miles in breadth, according to the approach or receſs of the mountains, with which it is guarded on all ſides, except on the north, where it is diſcharges itſelf into the ſea. The weſtern parts of it are more barren, except upon the ſea coaſt. The crops principally cultivated are, wheat, oats, barley and peaſe, with red and white clover and rye graſs, potatoes, and a few turnip.

Soil and Climate.—There is a variety of ſoil in this county, conſiſting of gravel, clay and loam; chiefly loamy gravel, and ebb ſhale. The climate is reckoned moderate; wheat is commonly ſown in October and November, peaſe in February, oats early in March, and barley in April. Harveſt is reaped in Auguſt and September.

Draining.—In Denbigſhire, I am ſorry to ſay, as little attention is paid to draining, as in any other of the Welſh counties I viſited. Mr Lovatt of Chirk, who is agent or factor upon ſome conſiderable eſtates in this county, has made great improvements in this particular, not only on the lands which he ſuperintends, but alſo on the lands he farms himſelf, part of which is his own property, and the other part he holds by leaſe, which is not common in this county, nor in North Wales in general. The width of the main drains, which are left open, depends upon the nature of the ſoil. If boggy, from 3 to 6 feet wide at top; if otherwiſe, about 2 or 3 feet. The ſide drains are cut about 18 inches deep, and about 10 wide. Two ſide ſtones are then firmly placed and covered; after this the remaining ſpace is filled up with ſmall ſtones, until they reach within 9 inches of the ſurface, which are covered with ſhaw, fern or furze, to prevent the ſoil from getting to the ſtones; at laſt the original ſurface is replaced. If boggy land, in lieu of ſtones he makes uſe of faggots and furze. I viſited his farm, and found his drains completely to anſwer the purpoſes for which they were intended; and ſo ſuperior was his ſtyle of agriculture to that around him, that I could diſtinctly point

out

the different fields under his management. The reaſons aſſigned for the general neglect of the other fields, were, the ſmallneſs of farms, and the want of leaſes on liberal terms.

Roads.—The turnpike roads are in much better repair than the parochial; and although the waggons run in general on narrow wheels, I found the roads in much better order than many in North Wales, where they uſe the broad wheels, which I have endeavoured to deſcribe, in my ſurvey of Montgomeryſhire. The public roads are commonly 10 yards wide, raiſed in the middle about 12 inches, covered 9 inches thick, with a bed of ſtones, broken ſmall, on which is laid ſcreened gravel. The gentlemen in this county claim the merit, of having diſcovered the beſt method of breaking ſtones for the roads, which they do to the ſize of a ſwan's egg; and find them much more durable than that of a larger ſize, as they ſooner cement. They are likewiſe very particular in ſcraping or raking the roads, by which means no water is allowed to lodge on any part of them. No trees are ſuffered to grow near them, and every perſon adjoining is compelled to clip his fence, ſo that the ſun and wind may both have their proper influence. It is a miſtaken notion, in my opinion, that prevails in many places in North Wales, (which, however, does not apply to Denbighſhire) that employing people to mend the roads in winter, when the days are ſhort, is throwing away the public money: Than which nothing can be more abſurd; for it muſt be allowed, that it is much eaſier keeping, than putting in repair; therefore, inſtead of being profuſe, money might be ſaved, by having labourers conſtantly on the roads; and I may alſo remark, that more attention ought to be paid in winter than in ſummer; the reaſon of which is ſo obvious, that it does not require to be pointed out.

Incloſures and Fences.—Excepting the mountains, *alias* commons, the greateſt part of Denbighſhire is incloſed, and thoſe incloſures are of very various ſizes. Almoſt every kind of fence is to be met with in this county. Dry ſtone, ſtone and lime

ſtone walls, hedge, ditch and hedge, dry ſtone wall and hedge upon the top; this laſt is highly eſteemed. As to the hedges, ſome are planted with hawthorn alone, which is reckoned the moſt hardy and laſting; while others are compoſed of a variety of different plants. Thoſe parts of the commons, which might be made arable land, (of which there are very conſiderable tracts) would pay well, were they incloſed, and otherwiſe improved. The encreaſe of rent between encloſed land and open fields, is reckoned at $\frac{2}{3}$ upon an average; and the ſtock is greatly improved, by being much better kept than on commons, which never fail to be overſtocked. With regard to the ſize and nature of the incloſures, the ſituation of the ground, and the nature of the ſoil, ſhould be attended to; and if a common is to divided, much depends on its extent and quality, and the number of freeholders that have intereſt in it. Theſe allotments are afterwards ſubdivided, always according to the will of the proprietor, or the occupier of the farm. Incloſing has been found to encreaſe population, becauſe the labourer and his family find conſtant employment in conſequence of that improvement. Cottages are greatly increaſed ſince that ſpirit began, and labourers find conſtant employment in their own country, inſtead of being under the neceſſity of emigrating for their ſubſiſtence.

Wood Lands.—Denbighſhire is pretty well wooded with old plantations, and I was informed, they were in general tolerably well attended to. Mr Lovett (of whoſe improvements I have already had occaſion to take notice) prevailed upon the land owners of the eſtates under his direction, to take the wood lands under their own management, and appoint people, whoſe time is entirely taken up in ſecuring the fences, ſo as not to admit a ſheep, or any other animal, to get in, to brouſe on the trees. This precaution is of the higheſt importance to a young plantation. He alſo points out the ſuperfluous branches, and orders them to be lopped off; and, at ſtated times, the woods are thinned to the beſt advantage. Mr Middleton of Chirkcaſtle has, I believe, planted more trees than any gentleman in this

this county, or indeed any in North Wales. The day on which I viewed his plantations was exceedingly unfavourable, being very wet, and at times remarkably foggy. I was told, however, that they extend for many miles, and the number of acres employed in this way, I think is about 700, beſides the old plantations, all of which are under the management of Mr Lovett. There is no country, I was informed, that produces better oak timber than Wales, and a great deal of it is of immenſe ſize, and very fit for preſent uſe. *But here*, as well as in other Welſh counties, planting has in general been neglected, which makes it abſolutely neceſſary to allow thoſe fine trees to ſtand, for beauty and ſhelter to the county, which, in time, will become of little or no value, entirely owing to the remiſsneſs of the proprietors, in this reſpect. In ſome of the counties in North Wales, I have endeavoured to point out the impropriety of ſo great a neglect, and I hope land owners will take the hint, by ſeeing it their intereſt.

Waſte Lands.—There are no common arable lands in this county, but ſeveral commons of very conſiderable extent, at preſent depaſtured by the cattle and ſheep belonging to the adjoining tenants. It is needleſs again to obſerve, that they are invariably overſtocked and unincloſed. To particularize all the improvements that might be made upon the waſte lands in Denbighſhire, would be folly in me to attempt, as the climate and quality of the ſoil muſt be conſulted, which was impoſſible for me to do, in an excurſion of this kind. But from the beſt authority, and my own obſervations, I can aver, that if a diviſion of them were to take place, a great part might be converted into arable land; and, where water can be applied, (which might be done in many inſtances) into rich meadows. Draining, incloſing, and planting, ought never to be neglected. The moſt ſterile parts might alſo be improved; but to attempt that, whilſt there were an acre of better land to cultivate, would be the higheſt imprudence, not to call it worſe. No advantages accrue from

the preſent mode of commonage; on the contrary, the balance is very commonly on the wrong ſide of the ledger.

Watering Lands.—Notwithſtanding the very important advantages that might be derived from the flooding of lands, yet in Denbighſhire, where in many places it is perfectly practicable, it is totally overlooked; this *alſo* I impute to the want of leaſes. Mr Lovett has been at a great deal of pains to introduce watering, by procuring a man from Gloceſterſhire, where that practice is well underſtood. He floats upwards of 60 acres annually, in a very maſterly manner; and, from the very rapid improvement he has made, it is to be hoped, that it will ſoon become more general. His ſtream is the Keiriog river, one of the branches of the Dee, from which he is amply ſupplied. It is the opinion of Mr Lovett, and ſome other gentlemen in Denbighſhire, with whom I had occaſion to converſe, that the climate is rather too cold to admit of grazing watered lands in the ſpring, by which means 20 s. *per* acre is loſt. But I beg leave to ſurmiſe, that I got a much more favourable account of the climate in Denbighſhire, than that of Merioneth; and Mr Corbet, whom I have already mentioned, floods ſome hundred acres, and finds his ſpring grazing equal to 20 s. *per* acre; and afterwards cuts as much hay as Mr Lovett, which is about 2 tons *per* acre. Mr Lovett cuts his hay in June, or the beginning of July; Mr Corbet cuts in the beginning of Auguſt, after paſturing the fields to the firſt of June. That Mr Lovett may have more after graſs, I will not deny; but ſurely ſpring food is ſo much more valuable, that every exertion ought to be made to obtain it. I am convinced, where watering is practicable, graſs can be raiſed in greater abundance in Denbigh than in Merionethſhire, the former being more favourable for vegetation. When it has been the theme of ſo many uſeful and intelligent writers, to point out the vaſt variety of ſpring, as well as winter food for cattle, why ſhould not this, the beſt, and moſt eaſily obtained, be ſtrongly recommended? Mr Lovett claims the merit of having introduced watering

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into North Wales, but it was certainly practiſed long before that period, though I ſaw none done in ſo complete a manner, excepting the lands of Mr Corbet in Merionethſhire.

Farms.—With regard to the farms in this county, like the generality of thoſe in North Wales, they are too ſmall to admit of improvements, not exceeding, upon an average, 50 acres, and occupied by tenants at will. It is the opinion of the beſt informed people in North Wales, that were leaſes granted upon liberal terms, and the farms enlarged, ſo as to admit of being laid out to the beſt advantage, and cultivated at much leſs expence, the exertions of the farmers could not fail ſoon to improve the country. Three lives, on an unimproved, and 21 years leaſe on an improved farm, is recommened. The farms are employed in paſture and huſbandry, and the rents are very various; the higheſt rent that I heard of was 40s. *per* acre, (except ſmall ſpots in the neighbourhood of towns, that were ſtill higher,) and the loweſt at 2s. 6d. *per* acre.

Farm Houſes and Offices.—The old farm houſes and offices in this county have been made without any attention either to convenience or ſituation; but in thoſe built of late years, *both* have been conſidered, and they are kept by the landlords in good repair; but even theſe are ſtill deficient in room to contain *all* the cattle, which is undoubtedly neceſſary for producing a greater quantity of dung. I have had ſo often occaſion, in the courſe of this ſurvey, to point out the loſs a tenant may ſuſtain from the want of a complete ſet of offices, and a commodious farm yard, that at preſent I ſhall forbear to ſay any thing farther on the ſubject.

Manure.—Dung and lime are the chief manures in Denbighſhire, and compoſt dung hills are ſometimes made of lime, ſoil, and dung. Mr Lovett takes this method of making compoſt dung hills; he collects the head-lands, ſcouring of ditches, drains and ſcraping of the roads, which he forms into ridges of about 4 or 5 feet high, and the ſame breadth in the baſe. It remains in that ſtate for ſome months, when it is turned over;

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it is then mixed with all the dung or muck he can ſpare, and ſometime before he carries it out, he applies the proportion of about one tenth part of ſlacked lime to the whole of the ſoil and muck. It then becomes an excellent top dreſſing for meadowing and paſture, and is ſometimes applied to arable lands.

Implements of Huſbandry.—The waggons run in general on narrow wheels.

The ſize of the cheſt,	Length,	11 feet 2 inches.
	Breadth,	3 11
	Depth,	2 5

Carts and tumbrels in proportion.

The common length of the plough beams is 7 feet, with iron earth boards. The harrow, drawn by two horſes, is 3 feet 6 inches high, 3 feet 6 inches broad, at one end, and 2 feet 10 inches at the other.

Very few ox teams are uſed. Of late, they have been introduced upon large farms, and are geared ſingle, in the ſame manner as horſes.

Rotation of Crops.—With reſpect to the rotations obſerved by ordinary farmers in Denbighſhire, I beg leave to refer to thoſe in Flintſhire and Montgomeryſhire, which are pretty ſimilar; but ſhall mention a mode purſued by Mr Lovett, and a few other gentlemen in this county, that is found to anſwer extremely well. Suppoſing the land very foul of couch graſs, and other weeds, it is ploughed before winter, and in the ſpring, and the beginning of ſummer, it is well wrought for turnips. About 15 tons of well reduced dung is allowed to an acre, and the turnips are ſown about midſummer, which are twice hoed. They eat them with ſheep upon the field, and generally begin about the middle of November; or carry them off to the cattle in the buildings; by the latter mode, an amazing quantity of dung is made. The ſecond crop is barley, with which about 15 lib. of red clover is ſown, and 2 pecks of rye graſs ſeed, upon each acre; the third year hay; and when the after crop of graſs is eaten up, about 2 tons of compoſt to an acre,

acre, is carried out to the field, which is ſown with wheat upon one furrow. The arable parts of the farm are divided into four equal parts as near as poſſible, and the ſame rotine goes on without variation. The turnips are ſown broad caſt, notwithſtanding of which, Mr Lovett's field was as clean as a garden, and the crop very good, being at great pains to have people who properly underſtand hoeing. But I ſaw ſome fields, notwithſtanding the favourableneſs of the ſummer, that were full of weeds; and, I am convinced, had they been ſown in drill, inſtead of broad caſt, that the crop would have been much more abundant, and the land in better condition. A great part of the ſoil in Denbighſhire is well adapted for turnip and other green crops, which, however, are ſeldom cultivated. Fallowing is ſometimes practiſed, but not ſo generally as it ought to be. Where it has been tried upon a ſtiff clayie ſoil, well worked and manured, it has been found to anſwer extremely well; but the heavy tithe, and want of leaſes, deter many people from attempting it.

Paring and Burning.—The practice of paring and burning was common in Denbighſhire above a century ago, and was conſidered a very high improvement, but it is now almoſt entirely exploded. Mr Lovett, whoſe experience in the agricultural line has been very conſiderable, ſays it ought to be avoided in all places, excepting boggy, or ſour hide bound lands, or where there is a good depth of ſoil.

Labour.—An active healthy labourer, who is conſtantly employed, earns 1s. 4d. *per* day in the ſummer ſeaſon, for which he works from 6 to 6: In the winter, 1s. 2d. and works from day light in the morning untill dark. If employed by piece work, he expects to earn 2s. *per* day.

Price of Corn and Proviſions.

At preſent Wheat ſells for 6s. 6d.
Barley, - 4s
Oats, - 2s. 6d.
} *per* Wincheſterbuſhel.

Butchers meat at 3½d. *per* lib. of 16 ounces.

Live Stock —It is the opinion of the beſt informed gentlemen in agricultural affairs, that the ſtock in Denbighſhire might be greatly improved, by the introduction of new breeds of cattle, ſheep, and horſes; but very few efforts of the kind have been made. There is a great variety of breeds, and Mr Lovett thinks that the Welſh ſheep might be much improved, by breeding out of the beſt part of the ſtock, and providing them with better winter keep, an article very much wanted; but I am of opinion, that the moſt ſpeedy and moſt effectual plan would be, to croſs it with fine-wooled ſheep, many breeds of which are as hardy as the Welſh. The rot is the moſt common diſeaſe to which the ſheep in Denbighſhire are liable, particularly when the ſeaſon proves wet. Laſt year, from the almoſt inceſſant rains, great numbers were carried off by it.

Towns and Manufactures.—Denbigh, the capital, is ſeated on a ſteep rock, overlooking the beautiful vale of Clwyd. It has a conſiderable manufacture of gloves and ſhoes, the greateſt part of which are ſent to London. On the ſouth part of the vale, and near its head, is ſituated the town of Ruthin, which is very neat and populous. But Wrexham, lying on the eaſtern part of the country, is the largeſt, and contains more inhabitants, than than any in North Wales. It is a place of very conſiderable traffic. There are beſides many other towns and villages of leſs importance. Wool is the principal manufacture in Denbighſhire. The tenants, with the aſſiſtance of their domeſtics, manufacture it into fine and coarſe cloths, and likewiſe into ſtockings. Near to the village of Chirk is a foundary for cannon, and alſo iron forges; and on the borders of Denbighſhire are lead mines.

Fuel.—Coals are got in Denbighſhire, but the common fuel uſed by the common people is peat.

THE END.

HINTS

FOR

THE IMPROVEMENT

OF

NORTH WALES.

NOTHING, in my opinion, can retard the agricultural improvements of a country ſo much as the proprietors withholding leaſes from their tenants. As leaſes, either for 2 or 3 lives, or for a certain number of years, are commonly granted in all the arable parts of Scotland, it ſtruck me very forcibly when I was informed that almoſt *none* were granted in North Wales, excepting from year to year, or to ſerve ſome political purpoſe. This circumſtance I think, accounts in a great meaſure for the very backward ſtate of huſbandry in thoſe diſtricts, as no prudent man will riſk his property in the improvement of another's eſtate, without a proper ſecurity of tenure, that he may not only have an opportunity of being reimburſed the money laid out, but alſo of obtaining a recompenſe for his exertions. This uncertainty of tenure, at all times, not only diſcourages, but abſolutely prevents that induſtry and attention ſo neceſſary to improvement; and I was repeatedly told, that the tenants were afraid of making the ſmalleſt advancement in this reſpect, leſt they ſhould next year be ſubjected to a riſe of rent, or be turned out of their poſſeſſions. An inſtance of this kind happened when I was in Flintſhire. A farmer in the vicinity of Holywell, more induſtrious than his neighbours, had been at great pains to improve his farm, which on this account was coveted by another, who offered three or four times the preſent rent for it. The landlord, who perhaps would not have thought of an increaſe of rent, or at leaſt not ſo great a riſe, had it not been for this interference, could not reſiſt this temp-

tation, and informed his tenant, that he muſt either remove, or pay very nearly the proferred rent. The tenant conſidered this treatment as extremely hard, having been conſiderably out of pocket in carrying on his improvements; but as he had no leaſe, he could not help it, and had only to regret that he had placed implicit confidence in his landlord. It may be eaſily believed, that a circumſtance of this kind ſeldom occurs; becauſe the tenants, dreading the conſequences, are averſe from all improvements, which is not to be wondered at from the fact ſtated, and which I think is inconteſtible, having heard it related in Holywell, and likewiſe in its neighbourhood. After all the landlord would not agree to grant a leaſe, notwithſtanding the great rent offered, and as the perſon who propoſed it, refuſed to have any thing to do with it without a leaſe, it was ſuppoſed the preſent tenant would ſtill remain in the farm. This, in my opinion, evidently ſhows the propriety of granting leaſes, as they afford ſecurity to the farmer, that he may go on with ſpirit, in the neceſſary improvements, by which the proprietor is the greateſt gainer in the end. I may here mention one objection ſtated againſt granting of leaſes, which I heard frequently made uſe of; that the Welſh farmers are indolent and inactive, and therefore have not the means of improvement. That they want the means of improvement is no ſurpriſe, and the reaſon of their ſlothfulneſs appears to me, to proceed merely from want of encouragement. As a proof of this, Lord Penryn, who has enlarged his farms and granted leaſes to his tenants, has doubled his rents (which no proprietor in his neighbourhood has done,) and his tenants, although Welſhmen, are in as thriving a condition as any in North Wales, and in general more ſo. For this reaſon alone, were there none other to adduce, I am perfectly convinced, that the proprietors, who do not grant leaſes, have neither their own intereſt, nor the intereſt of their country in view. Were the farmers ſo reduced, as to be unable to make the ſmalleſt efforts in the way of improvement, it would no doubt be the intereſt

of

of the proprietor, to take one farm after another into his own hands, and, after improving it, to let it upon a leaſe. This method would ſpeedily improve the country, and great advantages would accrue to the landlord. The length of time, for which a leaſe ought to be granted, ſhould in my opinion depend entirely on the ſtate of cultivation in which the farm is; becauſe land, in an unimproved ſtate, requires a great outlay of money, and a great many years muſt elapſe before the farmer can enjoy the fruits of his expence and labour. He is therefore entitled to a much longer leaſe, than when the land is in a high ſtate of cultivation. It is not above half a century, ſince the ſpirit for agricultural improvement commenced in Scotland, which I believe originated in Eaſt Lothian, in conſequence of long leaſes. They were granted for 2 and 3 lives; or 2 and three nineteen years, by which means that county can boaſt of as improved a ſtate of huſbandry as any in England, and perhaps more ſo, when the nature of the ſoil and climate are conſidered. Scotland in general, ſoon followed the example, and ſince that period has made very rapid progreſs in the ſcience of agriculture, and I hope ſoon to hear of equal improvements being made in North Wales, through the ſame means. The leaſes in Scotland are not in general filled with uſeleſs ſtipulations, ſuch as liming at certain periods; obſerving particular rotations, &c. which is frequently the caſe in England. Theſe are left entirely to the diſcretion of the tenant, whoſe intereſt is moſt deeply concerned, and who ought to be a better judge of thoſe matters than a ſteward or agent, commonly bred to the law, to whom the drawing of the leaſe is too often entruſted, and, by inſerting clauſes that admit of quibble, tend to create diſputes between the landlord and tenant, which could not otherwiſe happen. From the wetneſs of the ſeaſons, it is often utterly impoſſible for the moſt ſkillful and diligent farmer, to put his ſchemes into practice, however well concerted. Therefore futile reſtrictions on the tenant, in regard

gard to cropping, &c. cauſe differences which are commonly againſt both landlord and tenant.

A farmer will always act according to the beſt of his judgement for his own intereſt, and that never fails to be alſo for the intereſt of the landlord, except when the leaſe is near about out. All that I conſider neceſſary for the landlord in this reſpect is to bind the tenant to leave a certain proportion of the farm in graſs; to guard againſt ſcourge crops two or three years before the expiration of the leaſe; to allow no dung to be carried off it, at that period; and to leave the houſes, offices, and fences, in as good order as he found them. The landlord ſhould always be left to protect his own plantations from the inroads of all animals. Theſe I conceive to be abſolutely neceſſary for the intereſt of both proprietor and farmer, becauſe I have known it happen more than once, that farmers, having no proſpect of a renewal of their leaſe, have begun to overcrop ſo ſoon, that they not only hurt the land, but alſo materially injured themſelves. This however is never to be dreaded, until within 3 or 4 years of the expiry of the leaſe. To conclude this ſubject, I beg leave, for the information of ſome of the gentlemen in North Wales, who perhaps may not have had an opportunity of ſeeing it, to inſert the plan of a leaſe, deviſed by the late lord Kaims, to whom the country has been much indebted for his writings on agricultural affairs, and which I have obtained from the ingenious Dr Anderſon, alſo juſtly celebrated for his writings in agriculture and various other intereſting ſubjects.

PLAN OF A LEASE BY LORD KAIMS,

WITH

DR ANDERSON'S REMARKS.

" LEASES were invented for the purpoſe of giving to the " farmer ſuch a ſecurity as might induce him to become in- " duſtrious from the hopes of profit, but they have never yet been

" been brought to the ultimate perfection, in practice of which " this kind of tenure is ſuſceptible. In ſome caſes, the ſecu- " rity the tenant enjoys under their protection is greater, and " in others leſs; and it will be found by experience, that " wherever the exertions in agriculture have been vigorous, " the ſecurity the tenant enjoyed has been conſiderable, and " wherever his tenure is precarious, they have been proportion- " ally languid.

" The æra of the commencement of agricultural improve- " ments in Scotland in general, is well known to have been " the year 1746*, the preciſe time when the heritable juriſ- " dictions in Scotland were aboliſhed, in conſequence of which " thoſe vague explanations of the terms of a leaſe which ren- " dered all ſtipulations for the farmers protection nugatory, " were entirely done away, and every thing that was indefinite " was declared to be illegal, and conſequently void. It was " ſome time after this before the tenants knew how to avail " themſelves of this benignant and politic regulation, and ſo " long they continued torpid and indolent; but at length gra- " dually beginning to feel the ſweets of that affluence which " induſtry enabled them to acquire, their exertions, though at " firſt feeble, by degrees acquired additional force, till of late " they have, in many places, advanced with a rapidity that was " unexampled in any other times.

" An obſerving man who has been bred in Scotland, and " who has been accuſtomed to take notice of what is going on " around him, is aſtoniſhed when he enters England, at the lan- " gour and indolence that he ſees almoſt every where there " prevail in regard to agriculture, while the climate is ſo in- " viting, the ſoil ſo fertile, and every thing he ſees ſo favoura-

 " ble

* " In Eaſt Lothian in particular, improvements commenced a little before " that period, in conſequence of the long leaſes granted by Mr Cockburn of " Ormiſton, whoſe tenants ſet the firſt example of improved culture in this " part of the iſland."

" ble in his opinion to the wiſhes of the farmer. At a loſs to
" account for this phenomenon, he feels an involuntary impulſe
" to accuſe the people of a vice, that I believe never yet pre-
" vailed in any country, though it has been often imputed to
" mankind, viz. an unnatural ſpirit of indolence,—a careleſs
" langour,—an indifference to the pleaſures and comforts of
" life, which made them reſt ſatisfied with fewer enjoyments
" than were eaſily within their reach. It is only when he en-
" ters into minute examinations, that he finds that the farmer's
" induſtry is there taxed with a number of indefinite claims,
" ſuch as poors rates, tythes, and, above all, an annual tenure
" only of his farm; which is enongh to repreſs every generous
" emotion within him, and ſink him into the loweſt range of
" dejection*. He is then no longer at a loſs to account for
" the ſnail-like progreſs of the farmer's advances; and he bleſ-
" ſes Heaven for having caſt his lot in a country which though
" poor is ſtill in the train of becoming rich, becauſe there tythes
" are

* " I include this precarious tenure among the taxes on induſtry; becauſe
" it is very obvious, that if by means of his induſtrious exertions, a farmer ren-
" ders his lands more fertile, he makes them a more tempting bargain for ano-
" ther to offer a higher rent than they could have afforded before. The fear
" of this muſt conſtantly repreſs his exertions. Nor is this the only thing he
" has to dread. While his tenure is only for ſix months, as many of them are,
" ſhould his ſpirit be uncomplying with the wiſhes of his landlord, the conſe-
" quence is obvious. He is therefore in ſome meaſure a ſlave. Is it a wonder
" if in this country, where freedom of mind is juſtly deemed the higheſt prero-
" gative of man, that the line of agriculture ſhould be ſo univerſally abandon-
" ed by men of ſpirit, for other employments in which they can act with great-
" er independence? In theſe circumſtances are we to be ſurpriſed at ſeeing ſuch
" rapid advances made in every other branch of induſtry, while that of agricul-
" ture is in a great meaſure ſtationary? Had the committee of parliament, who
" two years ago made ſuch a diſcouraging report of the ſtate of our agricul-
" ture, conſidered this object in its proper light, they would have been enabled
" to deviſe better meaſures for accelerating its progreſs, than thoſe they unfor-
" tunately adopted.

" are definite, poors rates unknown, and the neceſſity of leaſes " is univerſally admitted †.

" But

† " It is a fact that muſt ſtrike every one who has made the tour of Britain, " eſpecially if he is acquainted with its former as well as preſent ſtate, that " though the exertions of ENGLAND in the *mercantile* and *manufacturing* lines of " buſineſs, have for the laſt half century been vigorous almoſt beyond compare, " yet in the line of *agriculture*, it has been comparatively languid: Whereas in " SCOTLAND, though ſhe ſtarted late, and has yet made but ſmall progreſs in " induſtry, yet the exertions in agriculture have nearly kept pace with thoſe " in the other departments. This can be aſcribed to no other circumſtances " but thoſe mentioned in the text. Among theſe the drawing of tythes in " kind is peculiarly diſcouraging to agriculture, as it not only affects the " tenant, but even the proprietor himſelf, who muſt, on this account, forego " many attempts he could have made in improvements with profit. The " proprietors of land in the neighbourhood of Aberdeen, who juſtly conſider " the expence of improving the ſoil as a purchaſe price, would in all caſes " find that though they may have a reaſonable profit, where no tythe is drawn, " they could have had none at all if that had been paid in kind. Indeed in " moſt caſes it is tythe alone is more than the whole profit they ever expect to " derive from it. The conſequence here is obvious; but the retardment which " this circumſtance will make when operating in millions of caſes over a whole " kingdom, baffles all attempt at calculation.

" To avoid this dreaded evil, extenſive tracts of land are left in England in " perpetual graſs, when it is by no means in a condition for yielding the moſt " abundant produce in that ſtate. The quantity of bread-corn is thus neceſſari- " ly diminiſhed, and with it the total amount of food even for beaſts is curtail- " ed. Nothing can be ſo ruinous to agriculture as thoſe particular covenants " ſo univerſally adopted in England for reſtricting the tenant in his operations. " Never did the Goths or Vandals, in the rudeſt ſtage of their exiſtence, think " of a device ſo abſurd as that of reſtricting the exertions of farmers by rules " which were deviſed when the practice of agriculture had ſcarcely had a be- " ginning. They were indeed contrived by ignorance, and are continued by " villainy. They are for the moſt part calculated to add to the power, and in " many caſes to the emolument of the ſteward, at the expence of the proprietor " and the public.

" Inſtead of thus ſtudiouſly contriving to depreſs the tenant, a wiſe ſyſtem " of policy would require that he ſhould be guarded againſt every ſpecies of op- " preſſion more than any other man, becauſe he is neceſſarily a more ſolitary " and defenceleſs animal than any other in the ſtate. At preſent there is no

" But though no man would occupy a farm in Scotland on
" any terms without a leaſe, and though no landlord there is
" willing to ſacrifice his intereſt ſo much to his caprice as to
" think of obtaining *tenants at will*, they never yet have been
" able to deviſe terms for a leaſe that have proved perfectly ſa-
" tisfactory either to themſelves or tenants; for the intereſts of
" theſe two parties *ſeems* to be in many caſes ſo directly oppo-
" ſite as to be irreconcileable, and they view each other with
" continual jealouſy, ſo that an unceaſing attempt to get the
" better of each other prevails, which is the ſource of many im-
" proprieties of conduct on both ſides.

" The univerſal aim of the tenant is to get a long leaſe, that
" he may be ſecured as long as poſſible from the landlord's in-
" terfering with the profits that his induſtrious exertions may
" enable him to derive from his farm: while the aim of the
" landlord as univerſally is, to deprive the tenant of the power
" of ever rendering the land worſe than it has at any time been
" brought to, and to make it devolve to him in that enriched
" ſtate at as early a period as poſſible. He ſeems to forget that
" nature hath rendered it impoſſible for a man in any caſe, to
" eat his loaf and have his loaf ſtill. If he expects profit from
" the labour of another, that other perſon muſt ſhare in it.

" The ſhorteſt period for which a ſpirited farmer will take
" a leaſe on any terms in Scotland is nineteen years; and
" though in lands that are already under good culture, and
" highly improved, it is very practicable for a man to make
" conſiderable exertions upon ſuch a leaſe, yet, in an unim-
" proved farm, where expenſive operations are in all caſes re-
" quired before it can be brought to yield good crops of any
" kind, no man, who is not deſtitute of common underſtanding,
" will think of attempting theſe operations without a leaſe of
" much

" line of buſineſs in which with the ſame capital, knowledge, and induſtry, a
" man will not live better and make more money than in agriculture: Spare
" him from indefinite exactions, and this would not be the caſe.

" much longer endurance, ſo that if that be withheld, the land
" muſt continue for ever in its natural ſtate. There are in-
" deed ſome caſes where the ſterility of the ſoil is ſuch that
" ſcarcely any leaſe would afford a prudent man encourage-
" ment to improve them, and ſuch fields muſt be left to the
" owner alone to improve. What tenant would ever think of
" laying out from fifty to an hundred pounds upon an acre of
" land, as has frequently been done about Aberdeen, before
" a crop of any kind could be put upon it? On a leaſe, there-
" fore, where improvements are required, the duration of that
" leaſe muſt be in ſome meaſure proportioned to the expence
" that muſt neceſſarily be incurred before theſe improvements
" can be effected, or they muſt be forever forborne. The man
" therefore who refuſes to grant a leaſe on improveable land,
" is like him who ſuppreſſes the birth of a child; he ſtifles the
" embrio before it was called into exiſtence; he deſerves to be
" held in execration by all mankind as a murderer and an aſ-
" ſaſſin. Few of the owners of land in Scotland can be accu-
" ſed of this crime. But ſo ſenſible are proprietors, that a
" farm which has once been brought into culture may ſtill be
" bettered, and that it always can be made worſe, that they
" have indicated a general wiſh to make the leaſe have an in-
" definite termination—ſuch as the life of the poſſeſſor or
" ſome other perſon. But againſt this kind of leaſe many te-
" nants have inſuperable objections: and all of them enter in-
" to ſuch a leaſe with reluctance, nor ever carry on improve-
" ments with ſpirit during the indefinite period. It muſt be
" owned, too, that where the leaſe is made to depend upon the
" life of the tenant himſelf, there is ſomething revolting to
" humanity in the idea that a widow and orphans, who have
" juſt had the misfortune to loſe their beſt ſupport in life,
" ſhould be, as it were, by that means ſtript of their property,
" and alſo reduced to comparative want. This plan is there-
" fore defective in ſome of the moſt eſſential requiſites; for

" equity joined with beneficence ſhould form the baſis of every
" ſocial contract.

" I am extremely happy to have it in my power on this oc-
" caſion to lay before the public at large, through means of
" the honourable board to whom this report is addreſſed, a
" plan of a leaſe which is perfectly adapted to ſecure alike the
" intereſt of the tenant and the legitimate rights of the land-
" lord; by which the rights of humanity can never be violated,
" and which can apply to all poſſible caſes, ſo that neither of
" the parties can ever acquire an undue advantage over the o-
" ther in any ſituation of things. To effect all theſe things
" appeared to me for a great many years to exceed the powers
" of human ingenuity to deviſe. It has been done; and
" the public are obliged to the late Lord Kaims for this excel-
" lent device.

" His Lordſhip propoſed that the leaſe ſhould extend to an
" indefinite number of years conſiſting of fixed periods, at the
" end of each of which a riſe of rent ſhould take place, with
" permiſſion for the tenant, at the period of each of theſe
" riſes of rent, to give up his farm if he ſhall ſee proper, and
" granting a ſimilar power to the landlord, upon proper terms,
" to reſume his land if he ſhall think fit. The particulars of
" this contract, and the grounds on which they reſt, are as
" under.

" He aſſumes it as a poſtulatum, that a landlord and tenant
" are capable of forming a tolerably juſt eſtimate of the value
" of the land in queſtion for a ſhort period of years, ſuch as
" it is cuſtomary to grant leaſes for in Scotland: ſay 21 years.
" And having agreed upon theſe terms, which, for the preſent,
" we ſhall call 100l. rent, the tenant expreſſes a wiſh to have
" his leaſe extended to a longer period. To this the proprie-
" tor objects, on this ground, that it is not poſſible to form a
" preciſe eſtimate of what the value of the ground may be at the
" end of that period. He has already ſeen that ground for
" the laſt twenty-one years has increaſed much more in value

" that

" than any perſon at the beginning of that period could eaſily
" have conceived it would have done, and therefore he cannot
" think of giving it off juſt now for a longer period, as a ſimi-
" lar riſe of value may be expected to take place in future.
" This reaſoning appears to be well founded; and therefore, to
" give the landlord a reaſonable gratification, he propoſes that
" it ſhould be ſtipulated, that if the tenant ſhould agree to give
" a certain riſe of rent at the end of that period, ſuppoſe 20l.,
" the landlord ſhould conſent that the leaſe ſhould run on for
" another period of 21 years; unleſs in the caſes to be after
" mentioned.

" But as it may happen that this 20 l. now ſtipulated to be
" paid at ſo diſtant a period, may be more than the farmer will
" find he is able to pay, an option ſhall be given to him to reſign
" his leaſe if he ſhould find that is the caſe, by giving the landlord
" legal notice one year at leaſt before the expiry of the leaſe;
" but if that notice be omitted thus to be given, it ſhall be un-
" derſtood that the tenant is bound to hold the leaſe for the ſe-
" cond 21 years, at the rent ſpecified in the contract. And if
" the landlord does not give the tenant warning within one
" month after that period, it ſhall be underſtood that he too
" is bound to accept of the ſtipulated additional rent for the 21
" years that are to ſucceed.

" It may however alſo happen, that the ſum ſpecified in the
" leaſe may be a rent conſiderably below the then preſent va-
" lue of the farm: or the proprietor may have very ſtrong rea-
" ſons for wiſhing to reſume the poſſeſſion of that land, or to
" obtain an adequate rent for it: a power therefore ſhould be
" given to him, in either caſe, to reſume the lands, if he ſhould
" ſo incline. But as a great part of that preſent value may be
" owing to the exertions of the farmer, who has laid out mo-
" ney upon the farm, in the hopes of enjoying it for a ſecond
" period of 21 years, it would be unjuſt to deprive him of this
" benefit, without giving him a valuable conſideration for that
" improved value. On this account it ſhould be ſtipulated,

" that

" that in caſe the proprietor at this time reſumes the farm, he " ſhall become bound to pay to the tenant TEN years purchaſe " of the additional rent he had agreed to pay; which in the " example above ſtated would be 200 l.

" But the land may be worth ſtill more than the 20l. of riſe " mentioned in the leaſe, and the tenant may be content to " pay more, ſay, 10 l. rather than remove; and he makes offer " accordingly to do ſo. In that caſe the landlord ſhould be bound " either to accept that additional offer, or to pay *ten* years pur- " chaſe of that alſo; and ſo on for every other offer the tenant " ſhall make before he agrees to remove from the farm.

" In this way the landlord is always certain, that he can ne- " ver be precluded from obtaining the FULL value for his " land, whatever circumſtances may ariſe. And if the tenant " ſhall prove diſagreeable, ſo that he would wiſh rather to put " another in his place upon the ſame terms, it never can be a- " ny hardſhip upon the landlord to pay the ſtipulated ſum; " becauſe it would be the ſame thing to him as if he bought a " new eſtate at TEN years purchaſe free of taxes: a thing he " never can expect to do. It is indeed true, that it would be " more advantageous for him to allow the preſent tenant to " continue: and therefore this alternative will be always, un- " leſs in very extraordinary caſes, accepted of, as it ever ought " to be; and thus the tenant's mind is impreſſed with a con- " viction that he will continue in his poſſeſſion; a conviction " that ought ever to prevail, becauſe it ſtimulates to induſtry in " the higheſt degree.

" And as the tenant is thus certain, that, at the very worſt, " his family muſt be entitled to draw a reaſonable remunera- " tion for the exertions of his induſtry, he can never find the " ſmalleſt tendency to ſlacken his endeavours in any way.

" By ſtipulating in the original leaſe, in the ſame manner, " that at the end of the ſecond 21 years the leaſe ſhall be con- " tinued for 21 years more; and ſo on at the end of the third,

" and

" and fourth, and any farther numbers of periods of 21 years,
" on agreeing to pay a ſpecified riſe of rent; reſerving to each
" party the ſame privileges as above deſcribed, the leaſe might
" be continued to perpetuity, without either party ever being
" in danger of having an undue advantage over the other. The
" tenant will always be certain of having a preference given
" him over every other perſon, and will of courſe go on with
" unceaſing exertions to better his land, which will of neceſſi-
" ty tend to augment the income of the proprietor much more
" than could have happened under any other ſyſtem of manage-
" ment.

" Such are the outlines of that plan of a leaſe that his lord-
" ſhip has propoſed. By this plan the tenant's hands are not
" tied up by reſtrictive clauſes dictated by ignorance, under the
" pretext of ſecuring the intereſt of the landlord. His inter-
" eſt is ſecured in a much more effectual manner, while the
" tenant is left at full liberty to avail himſelf of his knowledge,
" his ſkill, and his induſtry. Inſtead of ceaſing to begin any
" arduous undertaking, as he ever muſt do where he has no
" leaſe; or of beginning to improve for a few years only at the
" commencement of his leaſe, but ſtopping in a ſhort while
" in the midſt of his career, and then running it down to the
" ſame exhauſted ſtate as it was at this commencement, he
" continues to puſh forward without ever ſtopping; and ad-
" vances even with an accelerating progreſs for an endleſs pe-
" riod of years. No perſon but an experienced farmer can
" conceive the difference that would be between the produc-
" tiveneſs of the ſame land under this management, at the
" end of a hundred years, from what it would have been if
" let even for detached periods of 21 years each. In unim-
" proved waſte lands, the difference would approach to infini-
" ty. In lands which were originally very rich, the difference
" would be leſs conſiderable; but in all caſes where cultiva-
" tion could take place, the difference would be very great.

" It is worth remarking here alſo, that if this arrangement " were adopted, a new order of men in civil ſociety would be " created, different from any that at preſent exiſts. They " would be inferior in point of rank to that claſs of men who " are called *gentlemen*, and ſuperior in point of wealth and e- " nergy, not only to the preſent order of *farmers*, but even to " that claſs of men who are called *Yomen*. The peculiar poli- " tical advantage attached to this order of ſociety would be, " that while their exertions would always inſure affluence, that " affluence never could become ſuch as to permit them, by " imitating the life of the higher orders, to neglect their own " proper concerns; for the moment they did ſo, their exer- " tions in buſineſs would become ſlackened, in conſequence " of which they could not afford ſuch a rent as others around " them would be willing to give, and ſo they muſt quit their " leaſe.

" Here we are led to perceive the moſt eſſential difference " between *thus* granting what may almoſt be called a perpetual " leaſe, and every other *long* leaſe that ever yet has been tried; " for in all other long leaſes, if the rent ſtipulated at firſt ſhall " prove to be at laſt inadequate, and the holder of the leaſe be " reduced to poverty, by diſſipation or otherwiſe, he may nei- " ther himſelf be able to cultivate the ground properly, nor " can another be permitted to do ſo; and by this means the " proprietor may not only be, for a long period of years, de- " prived of an adequate value for his land; but that land alſo, " being locked up from improvement, may be doomed long to " remain in a degree of comparative ſterility. Nothing of that " kind could here happen. It differs alſo very much from that " ſort of tenure which is called yomanry, in which their " ſmall capital, which if properly applied, would have been " juſt ſufficient to give ſcope to agricultural exertions, by be- " ing locked up on the original purchaſe of the land, deprives " the poſſeſſor of the only funds he had in his power to apply " for improving his land. Inſtead of active exertions, and

" chearful

" chearful affluence through life, he is thus ſtinted in every " exertion; and is doomed to a perpetual hard ſtruggle againſt " the harraſsments of poverty. In ſhort, were I either a pro- " prietor or a tenant, I ſhould either let or take land upon " theſe terms in preference to any other I have ever heard of †.

" Several little clauſes have been overlooked by his lordſhip " which it would be neceſſary to advert to. Some proviſion " ought to be made reſpecting trees on a leaſe of this kind,— " as it is probable the tenant might find it convenient to plant, " which by the common law of Scotland, he cannot do at pre- " ſent with a view to profit ‡. Perhaps the wood, if any was " on the farm at the time of his entry, ought to be valued, " and he ſhould be bound to leave at leaſt an equal value upon " it, or pay the balance. Whatever timber trees he himſelf " had planted, he ſhould be at liberty to cut at pleaſure, for " the uſe of the farm, unleſs it were ſuch individual trees as " the landlord, from ſituation or other cauſes, ſhould think " proper to mark for reſervation. He ſhould alſo have per- " miſſion to fell ſuch trees as he inclined, unleſs as above re-

" ſerved,

" † Thoſe who are fond of political calculations may have here full ſcope " for their ingenuity, by ſuppoſing that two men of equal ſpirit, knowledge, and " capital ſet out in the agricultural line, one of them as a *farmer* on a leaſe of the " kind here propoſed, and the other a ſmall proprietor, or *Yoman*. Let the capi- " tal be taken any how at random, ſay 2000l. The *Yoman* we ſhall ſay lays out " 1500l. of that ſum on the purchaſe of a farm, which at thirty years purchaſe, " the uſual rate at preſent, would be worth 50l. a year, and he has 500l. left " for ſtocking and improving it. The other leaſed a farm which at a fair rent " was worth 200l. a year. Let him follow out the calculation, firſt in regard " to the profits that the different occupiers themſelves can enjoy, and the rate " at which their families may afford to live, and ſecond, with regard to the " augmentation of agricultural produce that each of them could afford to the " ſtate; and let this be continued for the ſpace of an hundred years. Let him " then ſtrike the balance and ſee what an amazing difference.

" ‡ By the law of Scotland, no tenant has a right to cut any trees upon his " farm.

" ſerved, or during the laſt ſix years of any of the 21 years of
" the leaſe. But in caſe of his removal, the proprietor ſhould
" either permit him to ſell the whole trees that were over the
" value of the ſtock at his entry, or take the whole, or ſuch part
" as he choſe to reſerve, at an appreciated value. In caſe of his
" removal alſo, the tenant ſhould be bound not to out-labour
" the ground during the laſt ſix years of the leaſe, or to crop
" it improperly, or to carry off any ſtraw or dung: otherwiſe
" to pay the damages that ſhould thus accrue to the landlord
" at the eſtimate of two honeſt men to be mutually choſen:
" and to leave the houſes in a habitable condition, and the
" fences in good repair. There ſeems to be no other clauſe
" neceſſary in ſuch a leaſe.

" *Farm buildings*, &c. With regard to ordinary leaſes for
" 19 or 21 years; one of the greateſt inconveniencies to which
" tenants in Scotland at preſent are ſubjected with regard to
" theſe is what reſpects houſes. The houſes are for the moſt
" part very poor; and many proprietors throw too great a
" burthen upon the tenants. This is highly impolitic. No-
" thing contributes more to the content and conveniency of a
" farmer than good and well diſpoſed buildings. It elevates
" his mind; gives him ſpirit to purſue his operations with ala-
" crity; and contributes in many inſtances to augment is
" profits. On theſe accounts he ought to have them †. But
" on no account ſhould he be induced to expend that ſtock
" upon building houſes which ſhould be employed in extend-
" ing his own proper buſineſs. It ought always to be done by
" the landlord; and, in general, a good ſet of houſes upon a
" farm will bring a much greater additional rent than the in-
" tereſt of the money expended upon them. If then a farmer
" poſſeſſing a farm, or bargaining for one, wiſhes to have
" houſes, theſe ſhould be built by the landlord in a good ſub-
" ſtantial manner, on a plan ſuggeſted, or at leaſt approved by
" the

† I never yet ſaw a thriving tenant who had not neat houſes.

" the tenant; the tenant furniſhing carriages, and paying at " the rate of 5 *per* cent for the money ſo expended; becoming " bound to uphold the houſes in good repair, during the cur- " rency of the leaſe; and to deliver houſes to the value at leaſt " of the money expended by the landlord; taking the tenant " bound likewiſe to pay, along with his rent annually, the pre- " mium of inſurance for the value of the houſes againſt loſſes " by fire. Any other reſtrictions are unneceſſary, even in this " caſe, than thoſe above ſpecified reſpecting the laſt years of " the leaſe.

" Draining, trenching, and other expenſive operations on a " farm that continue to be *permament* improvements, ought al- " ſo to be done by the proprietor; the tenant who deſires " theſe to be done, agreeing to pay the proprietor, during the " currency of his leaſe, by way of additional rent, at the rate " of five *per* cent on the money thus expended under his own " eye, and in the mode approved of by the proprietor. In this " way he would be making continual additions to his eſtate, " at the rate of twenty years purchaſe, *free of taxes;* and as " the tenant would thus alſo be enriched, he would be enabled " to adopt other ſpirited modes of improvement, which would " render it ſtill more valuable; ſo that, if the plan of a leaſe here " explained were adopted, the proprietor would in many caſes " be enabled to draw at the end of each fixed period inſtead of " five, perhaps twenty-five *per* cent for the money ſo advanced. " By making improvements ſomewhat on this plan, for the be- " hoof of his tenants, Mr Bayly of Hope near Mancheſter, has " advanced the rent of his eſtate in little more than twenty " years near ten fold!!! Operations on the ſame plan have " been carried on upon a conſiderable extenſive ſcale by Mr " Cumming of Achry in Aberdeenſhire: who has in like man- " ner by that means greatly encreaſed the value of his eſtate."

ROADS.

THE firſt and greateſt object to be attended to, in the im-

 provement

provement of a country, is good roads, as no melioration of any conſequence can take place until that is effected. I am ſorry to ſay that this is not ſufficiently attended to in North Wales. The parochial roads, with very few exceptions, are in a moſt miſerable condition; and many of the public roads are little better, particularly in the counties of Merioneth and Montgomery. In the former great exertions are now making to put them in repair, chiefly through the means of William Oakely, Eſq; who had lately become a reſidenter in the county, and who, with the aſſiſtance of ſome other gentlemen, have put the turnpike act in execution. But in the latter, nothing is doing in this reſpect, that I could perceive. I am at a loſs to account for this, unleſs the public funds are not properly looked after, or miſapplied, as there is no want of turnpike gates, (commonly two in a ſtage) and the collections, I was informed, were conſiderable. Good turnpike roads are not all that is neceſſary. The parochial roads are alſo of very great importance, and therefore require the vigilance of the truſtees. To ſee 3 horſes employed to drag a cart, the load of which does not weigh more than 10 cwt. and a waggon containing only 30 cwt. or 40 cwt., drawn by 4 or 5 powerful horſes, (as already ſtated in this report) ſurely calls aloud for reform; and I can venture to affirm, that one horſe could do as much work as 4, were the roads in good repair, and made in the moſt level direction, which would be an immenſe ſaving. But in ſo wretched a ſtate did I find many of them, (I cannot help repeating it) that I was often ſurpriſed how the carriages got along, notwithſtanding the multiplicity of horſes employed to ſo light a draught; for on horſeback it frequently happened, that I could not travel 2 miles an hour, although on good roads I generally rode ſix. As another proof of the badneſs of the roads, I have to mention a circumſtance that happened while I was at Welſh Pool, which, next to Wrexham, is one of the largeſt and moſt populous towns in North Wales. A gentleman arrived there, in a poſt chaiſe, on his way to Newtown, whence I had come, who aſked me, What kind of roads he had to travel? I told him they

they were the worſt turnpike roads, for a great part of the way, I had ever ſeen. In conſequence of this information, he immediately determined to take a pair of ſaddle horſes, having juſt travelled 20 miles on a turnpike road, where he had run the riſk every minute of being overſet, although a great part of it was through a vale. I have been more particular in detailing theſe facts, becauſe I was informed that many of the proprietors ſeldom viſit their eſtates; and when they do, it is generally in the ſummer months, when they can have no proper conception in what ſtate the roads are during winter. If the turnpike duty is inadequate to the expence of keeping the roads in proper repair, an additional tax ought to be laid on, which, inſtead of increaſing the expence of carriage, would diminiſh it, in a moſt aſtoniſhing degree, which I think requires no illuſtration. I would alſo beg leave to ſuggeſt, that inſtead of calling on the tenants for three days annual labour of each team for the public, and as many for the parochial roads, which I underſtand they perform reluctantly, they ſhould be aſſeſſed to a certain amount for each team; and I am perſuaded, that this money, judiciouſly applied, would do three times more than is done at preſent, and be found leſs oppreſſive to the tenant. This practice is now become very general in Scotland, and the advantages reſulting from it are very great. Formerly a farmer, in the midſt of his buſieſt operations, was called away to the roads, by which means he ſuſtained a loſs, perhaps twenty times more than his aſſeſſment. It was always in the ſummer ſeaſon that the ſtatute labour was demanded, notwithſtanding of which, it often became extremely inconvenient, as a farmer's labour is never at an end. By this mode, inſtead of employing farmers carts at all, people make a buſineſs of keeping carts and horſes, for the ſole purpoſe of ſupplying the roads with materials, which are broke and laid on by people bred to the buſineſs. This they do ſummer and winter, which prevents the roads at all times from getting into very bad repair, and thus a great deal of money is ſaved to the public. It appears to be an improper indulgence

dulgence to allow the mail coaches to paſs without paying tolls, as theſe carriages cut up the road perhaps more than any others now in uſe. The importance of good roads is ſuch, that too much care can never be taken to prevent any improper application of the funds appropriated to their ſupport, which I conceive this to be. But I leave this to the further conſideration of ſuch as are better judges of theſe matters than I can pretend to be.

OBSTACLES TO IMPROVEMENT.

I had often occaſion to ſee lands occupied by proprietors themſelves, which, from the great length of time they had been in graſs, had become moſſy on the ſurface, by which means they could not poſſibly be ſo productive as they ought. I hinted that it would be proper to plough them up, and take a few corn crops, which, by deſtroying the moſs, would render them more fertile in graſs afterwards; of this they were perfectly convinced, but the tithe deterred them, which amounts to only a mere trifle on graſs fields, and for this reaſon, I always found, that lands in graſs or paſture rented higher than thoſe under cultivation. Were it poſſible to pay an equivalent in lieu of tithe, agricultural improvements would go on more briſkly. Poors rates have alſo become a very heavy burthen; but means are deviſing to leſſen them. There were no poors houſes in North Wales, till of late. Two are now built, (very elegant ſpacious houſes, too much ſo in my opinion,) and ſome of the other counties are propoſing to follow the ſame plan. It has been found, that the poor are rather averſe from going into thoſe houſes, eſpecially as thoſe that are able are required to work. Many therefore decline it, and make ſhift for their maintenance at their own trades at home.

SIZE OF FARMS.

THE farms are in general ſo ſmall at preſent, that even if leaſes were granted, on the moſt liberal terms, a farmer has it not in his power to carry on his operations with œconomy. For inſtance, in the driving out of dung, or manure of any kind, a farmer who has only one cart, can never do it ſo frugally as one that can employ 2, 3, or 4, according to the diſtance it is to be driven. By this means he is enabled to keep all his people conſtantly employed, which cannot be done in the other caſe; and it will not be denied, that the ſooner dung is ploughed in, the better; for, by being expoſed, it ſoon loſes a great deal of its fertilizing quality, and could theſe operations be carried on at the ſame time, it would ſtill be more advantageous. With regard to a ſingle plough, I may alſo remark, that it muſt be frequently unyoked, eſpecially if the land requires to be ſown as ſoon as it is ploughed, by which a great deal of time is loſt. Nor can a ſmall farm be cropped to that advantage that a larger one can, as it does not admit of that variety of culture and cropping which an enlightened farmer would wiſh to adopt. Many other arguments might be adduced in favour of large farms, were it neceſſary, but the hints already given, I have no doubt are ſufficient.

LIVE STOCK.

I HAVE had frequently to obſerve, that great improvements might be made in the breeds of black cattle, ſheep and horſes, by the introduction of the beſt Engliſh breeds; yet very few attempts of the kind have been made, although thoſe who have tried it have ſucceeded to their wiſh, excepting in Angleſey, with regard to the Engliſh ram, which I have already taken notice of, and which, in my opinion, proceeded entirely from the want of winter food, an article very much

wanted throughout all North Wales. To thoſe who feed a few cattle on winter food, I would recommend curry-combing, which is not the practice in North Wales, but which will be found of the greateſt advantage, as cattle improve much ſooner by it. The method of feeding horſes in the houſe in the ſummer ſeaſon, upon cut graſs, I would warmly recommend, becauſe not only an immenſe quantity of dung might thus be made, but it will alſo be found by far the cheapeſt mode of feeding. This, however, has never been attempted in North Wales, even by people who raiſe clover and rye graſs in abundance. Milch cows are alſo more profitable, by being kept conſtantly in the houſe. In the neighbourhood of London, a good cow will yield 9 Engliſh gallons *per diem*, for the firſt 4 months after calving; but if for 9 months, upon an average, ſhe produces only 6 gallons, worth 6d *per* gallon, it will amount to above 40 l. *per* annum. Allowing that milk in North Wales is only worth 3d *per* gallon, ſtill 20l. *per* annum is more by one half than was ever produced there by one cow. For the information of the Welſh gentlemen, I ſhall here take notice of a letter addreſſed to the Honourable Board of Agriculture by Baron D'alton, an Hanoverian nobleman, who ſays, that cows kept in the houſe are more profitable than when fed out of doors, but they require to be bred to it from their infancy. The beſt foods are clover, lucerne, potatoes, yams, turnips, cabbages, carrots, peaſe, beans, and honſy graſs, a German graſs, not known in England. This evidently ſhows, that the experiment has been made, and has ſucceeded. For my own part, I have known it frequently practiſed in Scotland, and it always anſwered, even when the animals were not accuſtomed to confinement from their infancy.

FARM HOUSES AND OFFICES.

ALTHOUGH I have often had occaſion in the courſe of this ſurvey, to take notice of the bad accomodations of the tenants, in reſpect

reſpect to houſes, offices and farm yards, yet it appears to me of ſo great conſequence, that I muſt beg leave to recommend it again to the proprietors in general, as an object well worthy of their attention. The great quantity of dung loſt, from the want of proper accomodation, by this neglect, is beyond all calculation ; and *its* importance is ſo well known, as to make it unneceſſary to comment farther upon it.

FLOODING OF LANDS.

The watering of lands is alſo another matter, that requires the moſt ſerious attention. In many places, it is not very practicable, but even nature plainly points out the uſe which may be made of the paſſing ſtream. The number of rivers and rivulets, which occaſionally overflow their banks, and which produce abundant crops of graſs wherever they run, cannot teach ſome people to take the hint, or to avail themſelves of ſo fertile a manure, although it may be obtained at ſo ſmall an expence *.

MANUFACTURES.

It would in my opinion, be of great conſequence to North Wales, where ſo great quantities of wool are manufactured, were carding and ſpinning mills erected; as waterfalls are to be got in abundance. This would tend greatly to reduce the price of the article, which is the intereſt of every manufacturer, as it enables him to bring his goods to market at a cheaper rate. There is however only one mill of the kind in North Wales. With regard to the ſtockings manufactured

* I was informed, that in *one place* in North Wales, an experiment had been tried to water lands by the water of ſome ſprings, ſtrongly tinctured with ſome metallic impregnation, I think copper, which did harm rather than good. But ſuch *hurtful* mineral impregnations are very rare, and need not in general be dreaded.

ſactured in North Wales, it appeared to me, that the worſted thread was ſpun too hard. They had not the ſoft feel of thoſe made in Shetland, with which I compared them, and I thought them higher priced. The Shetland ſtockings, which were as fine, and much ſofter, coſt only 3s. *per* pair, and the price of thoſe in Wales was 4s. though of the ſame quality or nearly ſo. Both were made of lambs wool.

CONCLUSION.

I could hear of no peculiar cuſtoms in any one of the counties in North Wales, that could be uſeful to others. The method of thatching ſtacks, although neat, is ſo tedious, and at the ſame time of ſo little conſequence, that nothing more need be ſaid upon it. There are no ſocieties inſtituted for the improvement of agriculture. With regard to the names, deſcriptions, and addreſs of thoſe proprietors and farmers, who are the moſt active and ſkilful improvers in North Wales, and who are moſt likely to be uſeful correſpondents to the Board of Agriculture, I have mentioned ſeveral in this report, and perhaps there may be many more, whom I had not an opportunity of ſeeing. I was told, that Sir Robert Vaughan, M. P. who has lately become an active improver, and whom I am very ſorry to ſay I had not the honour of ſeeing, can point them out. To finiſh the whole, I have only to remark, that I have not ſeen a country ſo inviting as that of North Wales in general, where a farmer of induſtry and ſkill could be better ſituated, provided the landlords would grant proper leaſes This I have no doubt will ſoon be the caſe, as many landlords were convinced of the propriety of them, from ſome facts which I took the liberty to ſtate. It is my anxious wiſh, that the improvements ſuggeſted by the Board of Agriculture may extend to the moſt remote parts of the iſland. They are the ſuggeſtions of patriotiſm and of public virtue, and tend to exalt the national character and credit.

FINIS.

G. R. III. BRITISH MUSEUM

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